#### 9.0 SUBMISSION FORMS AND CERTIFICATIONS

Section 9.0 contains:

**Appendix A:** Proposal Cover Sheet

Appendix A (or photocopy) must be signed and included with each proposal submitted.

**Appendix B:** Project Summary Form

Appendix B (or photocopy) must be included with each proposal submitted. Don't include proprietary or classified information in the project summary form.

**Appendix C:** Cost Proposal Outline

A cost proposal following the format in Appendix C must be included with each proposal submitted.

**Appendix D:** Fast Track Application Form

A DoD pilot program under which projects that attract outside investors receive interim funding and selection for Phase II award provided they are "technically sufficient" and have substantially met Phase I goals.

**Appendix E:** Company Commercialization Report

A report that identifies each Phase II SBIR and/or STTR project your firm has received, and Phase III sales and/or funding resulting from each project. All Phase I and Phase II proposals must include a Company Commercialization Report.

**Reference A:** Proposal Receipt Notification Form

**Reference B:** DTIC Information Request Form

**Reference C:** Directory of Small Business Specialists

**Reference D:** SF 298 Report Documentation Page

**Reference E:** DoD Fast Track Guidance

Reference F: DoD's Critical Technologies

TOPIC NUMBER:

**Reference G:** DoD SBIR/STTR Mailing List Form

APPENDIX A

## U.S. DEPARTMENT OF DEFENSE

# SMALL BUSINESS INNOVATION RESEARCH (SBIR) PROGRAM PROPOSAL COVER SHEET

Failure to fill in all appropriate spaces may cause your proposal to be disqualified

TOTTO TOTAL .	=
PROPOSAL	TITLE
FIRM	NAME

MAIL	ADDRESS:
 CITY: ZIP:	STATE:
PROPOSED COST:PROPOSED DURATION:PROPOSAL IN MONTHS	PHASE I OR II:
BUSINESS CERTIFICATION:  • Are you a small business as described in paragraph 2.2?	YES  ****  Land
<ul> <li>Are you a socially and economically disadvantaged business as define (Collected for statistical purposes only)</li> </ul>	ed in paragraph 2.3?
<ul> <li>Are you a woman-owned small business as described in paragraph 2. (Collected for statistical purposes only)</li> </ul>	4? S
♣ Have you submitted proposals or received awards containing a signific equivalent work under other DoD or federal program solicitations? If y the agency or DoD component, submission date, and Topic Number in	yes, list the name(s) of Name
Number of employees including all affiliates (a	verage for preceding 12 months):
PROJECT MANAGER/PRINCIPAL INVESTIGATOR (BUSINESS)	CORPORATE OFFICIAL
NAME: NAME: TITLE:	<u></u>
TITLE:	
TELEPHONE:	<u> </u>

NO ☞ å © ᠘

63 € © **&**1

63 € © **&**1

13 € **0 £**1

For any purpose other than to evaluate the proposal, this data except Appendix A and B shall not be disclosed outside the Government and shall not be duplicated, used or disclosed in whole or in part, provided that if a contract is awarded to this proposer as a result of or in connection with the submission of this data, the Government shall have the right to duplicate, use or disclose the data to the extent provided in the funding agreement. This restriction does not limit the Government's right to use information contained in the data if it is obtained from another source without restriction. The data subject to this restriction is contained on the pages of the proposal listed on the line below.

PROPRIETARY INFORMATION:					
Before signing below, please read the cautionary no	ote at Section 3.	7			
SIGNATURE OF PRINCIPAL INVESTIGATOR OFFICIAL DATE	DATE	SIGNATURE	OF	 CORPORATE	BUSINESS

Nothing on this page is classified or proprietary information/data Proposal page No. 1

#### INSTRUCTIONS FOR COMPLETING APPENDIX A

#### AND APPENDIX B

#### General:

DOD Components employ automated optical devices to record SBIR proposal information. Therefore the proposal cover sheet (Appendix A) and the project summary (Appendix B) should be typed without proportional spacing using one of the following type styles:

Courier 12,10 or 12 pitch Courier 71 10 pitch Elite 71 Letter Gothic 10 or 12 pitch OCR-B 10 or 12 pitch Pica 72 10 pitch Prestige Elite 10 or 12 pitch Prestige Pica 10 Pitch

Whenever a numerical value is requested type the numerical character (i.e. in "Proposed Duration" type 6 NOT six).

When typing address information use the two alphabet characters used by the Post Office for the state, DO NOT SPELL OUT THE FULL STATE NAME (i.e. type NY not New York or N.Y.).

Complete and submit the Appendix A and B forms as pages 1 and 2 of each proposal. In addition, (4) complete copies of the proposal must be submitted (see Section 6).

Carefully align the forms in the typewriter using the underlines as a guide. The forms are printed to accommodate standard typewriter spacing.

Additional forms may be downloaded from our Home Page (http://www.acq.osd.mil/sadbu/sbir). They may also be obtained from your State SBIR Organization (Reference D) or:

DoD SBIR Support Services 2850 Metro Drive, Suite 600 Minneapolis, MN 55425-1566 (800) 382-4634

## APPX A

APPENDIX B

# U.S. DEPARTMENT OF DEFENSE SMALL BUSINESS INNOVATION RESEARCH (SBIR) PROGRAM PROJECT SUMMARY

Failure to fill in all appropriate spaces may cause your proposal to be disqualified

TOPIC NUMBER:	_
PROPOSAL	TITLE
FIRM	NAME
PHASE I or II PROPOSAL:	
<del></del> <del>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</del>	<del></del>
<del></del> +++++++++++++++++++++++++++++++++++	+++++++++++++++++++++++++++++++++++++++
Technical Abstract (Limit your abstract to 200 wo	ords with no classified or proprietary

	<del>+++++++++++++++++++++++++++++++++++++</del>	<del>}                                    </del>	<b>++++++</b>	፦}÷}÷}÷} ፦}÷}÷ ፦ h or Development.
				<del>&gt; '} '} '} '} '} '} '} '} '} '}</del>
List a maximum of 8				be the Project.
	Nothing on this page	is classified or propr Proposal page No. 2	•	/data

INSTRUCTIONS FOR COMPLETING APPENDIX A

AND APPENDIX B

General:

DOD Components employ automated optical devices to record SBIR proposal information. Therefore the proposal cover sheet (Appendix A) and the project summary (Appendix B) should be typed <u>without proportional spacing</u> using one of the following type styles:

Courier 12,10 or 12 pitch Courier 71 10 pitch Elite 71 Letter Gothic 10 or 12 pitch OCR-B 10 or 12 pitch Pica 72 10 pitch Prestige Elite 10 or 12 pitch Prestige Pica 10 Pitch

Whenever a numerical value is requested type the numerical character (i.e. in "Proposed Duration" type 6 NOT six).

When typing address information use the two alphabet characters used by the Post Office for the state, DO NOT SPELL OUT THE FULL STATE NAME (i.e. type NY not New York or N.Y.).

Complete and submit the Appendix A and B forms as pages 1 and 2 of each proposal. In addition, (4) complete copies of the proposal must be submitted (see Section 6).

Carefully align the forms in the typewriter using the underlines as a guide. The forms are printed to accommodate standard typewriter spacing.

Additional forms may be downloaded from our Home Page (http://www.acq.osd.mil/sadbu/sbir). They may also be obtained from your State SBIR Organization (Reference D) or:

DoD SBIR Support Services 2850 Metro Drive, Suite 600 Minneapolis, MN 55425-1566 (800) 382-4634

#### U.S. DEPARTMENT OF DEFENSE SMALL BUSINESS INNOVATION RESEARCH (SBIR) PROGRAM COST PROPOSAL

#### **Background:**

The following items, as appropriate, should be included in proposals responsive to the DoD Solicitation Brochure.

#### Cost Breakdown Items (in this order, as appropriate):

- 1. Name of offeror
- 2. Home office address
- 3. Location where work will be performed
- 4. Title of proposed effort
- 5. Topic number and topic title from DoD Solicitation Brochure
- 6. Total dollar amount of the proposal
- 7. Direct material costs
  - a. Purchased parts (dollars)
  - b. Subcontracted items (dollars)
  - c. Other
    - (1) Raw material (dollars)
    - (2) Your standard commercial items (dollars)
    - (3) Interdivisional transfers (at other than cost dollars)
  - d. Total direct material (dollars)
- 8. Material overhead (rate\_\_\_\_%) x total direct material = dollars
- 9. Direct labor (specify)
  - a. Type of labor, estimated hours, rate per hour and dollar cost for each type
  - b. Total estimated direct labor (dollars)
- 10. Labor overhead
  - a. Identify overhead rate, the hour base and dollar cost
  - b. Total estimated labor overhead (dollars)
- 11. Special testing (include field work at government installations)
  - a. Provide dollar cost for each item of special testing
  - b. Estimated total special testing (dollars)
- 12. Special equipment
  - a. If direct charge, specify each item and cost of each
  - b. Estimated total special equipment (dollars)
- 13. Travel (if direct charge)
  - a. Transportation (detailed breakdown and dollars)
  - b. Per diem or subsistence (details and dollars)
  - c. Estimated total travel (dollars)
- 14. Subcontracts (e.g., consultants)
  - a. Identify each, with purpose, and dollar rates
  - b. Total estimated subcontracts costs (dollars)
- 15. Other direct costs (specify)
  - a. Total estimated direct cost and overhead (dollars)
- 16. General and administrative expense
  - a. Percentage rate applied
  - b. Total estimated cost of G&A expense (dollars)
- 17. Royalties (specify)
  - a. Estimated cost (dollars)
- 18. Fee or profit (dollars
- 19. Total estimate cost and fee or profit (dollars)
- 20. The cost breakdown portion of a proposal must be signed by a responsible official, and the person signing must have typed name and title and date of signature must be indicated.
- 21. On the following items offeror must provide a yes or no answer to each question.
  - a. Has any executive agency of the United State Government performed any review of your accounts or records in connection with any other government prime contract or subcontract within the past twelve months? If yes, provide the name and address of the reviewing office, name of the individual and telephone extension.
  - b. Will you require the use of any government property in the performance of this proposal? If yes, identify.
  - c. Do you require government contract financing to perform this proposed contract? If yes, then specify type as advanced payments or progress payments.
- 22. Type of contract proposed, either cost-plus-fixed-fee or firm-fixed price.

#### U.S. DEPARTMENT OF DEFENSE

# SMALL BUSINESS INNOVATION RESEARCH (SBIR) PROGRAM FAST TRACK APPLICATION COVER SHEET

Failure to fill in all appropriate spaces may cause your application to be disqualified

To qualify for the SBIR Fast Track, a company must submit a Fast Track application and meet the other requirements detailed in Section 4.5 of the solicitation. This form, when completed and signed by both the company and its investor, should be included as the cover sheet of the Fast Track application. Instructions on where to submit the application are on the back of this form.

			PHASE I
TOPIC #:	CONTRACT #:		DATE:
			PHASE I
COMPLETION SPONSORING DO DATE:	DD COMPONENT:		
PHASE		I	TITLE:
FIRM			NAME:
MAIL			ADDRESS:
CITY: ZIP:			STATE:
TAXPAYER IDENTIFICA	ATION NUMBER:		
NAME	OF	OUTSIDE	INVESTOR:
MAIL			ADDRESS:
CITY: ZIP:			STATE:
TAXPAYER IDENTIFICA	ATION NUMBER:		

В	JSINESS CERTIFICATION:		YES
۰	Has your company ever received a Phase II SBIR or STTR award from	the federal government (including DoD)?	035 <b>%</b>
	If no, the minimum matching rate is 25 cents for every SBIR dollar.		
۰	Does the outside funding proposed in this application qualify as a "Fast	Track investment", and does the	rs. A
	questions about this, call the DoD SBIR Help Desk (800-382-4634). The	e Help Desk will refer any policy and/or	
	substantive questions to appropriate DoD personnel for an official response	• • • • • • • • • • • • • • • • • • • •	
un	ution: knowingly and willfully making any false, fictitious, or fraudulent der the Federal Criminal False Statement Act (18 U.S.C. Sec 1001), pur son, or both.		•
PF	ROPOSED SBIR AND MATCHING FUNDS:		
۰	Proposed DoD SBIR funds for the interim effort:	\$	
۰	Proposed DoD SBIR funds for Phase II:	\$	
۰	Total proposed DoD SBIR funds (interim + Phase II):	\$	
۰	Amount of matching funds (cash) the investor will provide:	\$	
ur	en selected for Phase II award, the company will be ineligible der the Fast track but also under the regular Phase II comp anted by the Component SBIR program manager.		-
CC	MPANY OFFICIAL	OUTSIDE INVESTOR OFFICIAL	
NI/	ME:		
INF	ME:NAME:		
	NAIVIE.		
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''	TITLE:		
	IIICC.	<del></del>	
TF	LEPHONE:		
	TELEPHONE:	<del></del>	
C14	GNATURE DATE	SIGNATURE	
		SIGNATURE	
υF	TE  Nothing on this page is classified or propri	etary information/data	

NO ⊯∰

rs §

If yes

inves

INSTRUCTIONS FOR COMPLETING APPENDIX D

SUBMISSION:

Submit the Fast Track application, including the three items discussed in Section 4.5(b), to the technical monitor for your Phase I project. In addition, submit a copy of the entire application to the Program Manager of the DoD Component funding the SBIR project (addresses below). Finally, send a copy of this application cover sheet, when completed, to the DoD SBIR Program Manager, 3061 Defense Pentagon, Room 2A338, Washington, DC 20301-3061. Do not submit other items in the Fast Track application to the DoD SBIR Program Manager.

#### **Department of the Army**

Dr. Kenneth A. Bannister Army SBIR Program Manager Army Research Office - Washington 5001 Eisenhower Avenue, Room 8N23 Alexandria, VA 22333-0001

#### **Ballistic Missile Defense Organization**

ATTN: TOI/SBIR (Bond) 1725 Jefferson Davis Highway Suite 809 Arlington, VA 22202

#### Department of the Navy

Engineering ONR 362 SBIR 800 N. Quincy Street Arlington, VA 22217-5660

## Office of the Director, Defense Research and

Lab Management & Tech Transition ATTN: SBIR Program Manager 3040 Defense Pentagon Washington D. C. 20301-3040

#### **Department of the Air Force**

AFPL/XPXP, Suite 6 ATTN: R.J. Dickman Wright Patterson AFB, OH 45433-5006

#### **Defense Special Weapons Agency**

ATTN: AM/SADBU, Mr. Bill Burks 6801 Telegraph Road Alexandria, VA 22310-3398

#### **Defense Advanced Research Projects Agency**

ATTN: SBIR Program Manager Ms. C. Jacobs 3701 N. Fairfax Drive Arlington, VA 22203-1714

#### **US Special Operations Command**

ATTN: SOSB/Ms Karen L. Pera 7701 Tampa Point Blvd. MacDill AFB, FL 33621-5323

#### REQUEST FOR COPIES OF THIS FORM:

Additional forms may be downloaded from our Home Page (http://www.acq.osd.mil/sadbu/sbir). They may also be obtained from your State SBIR Organization (Reference D) or:

DoD SBIR Support Services 2850 Metro Drive, Suite 600 Minneapolis, MN 55425-1566 (800) 382-4634

## APPX D

APPENDIX E

# U.S. DEPARTMENT OF DEFENSE SMALL BUSINESS INNOVATION RESEARCH (SBIR) PROGRAM COMPANY COMMERCIALIZATION REPORT

Failure to fill in all appropriate spaces may cause your proposal to be disqualified

FIRM	
NAME:	
MAIL ADDRESS:	
CITY: STATE:	
<ul> <li>How many Phase II SBIR or STTR awards has your firm received from the Federal Government (including DoD)?         (The answer "none" will not affect your ability to obtain an SBIR award.)         If your firm has received 5 or more Phase II SBIR and/or STTR awards from the Federal Government and the first     </li> </ul>	
award was received prior to Jan. 1, 1991, what percentage of your firm's revenues during your last fiscal year is Federal SBIR and/or STTR funding (Phase I and/or Phase II)?	
❖ Identify each Phase II SBIR and/or STTR project your firm has received and, for each project, provide the total revenue to date from resulting sales of new products or non-R&D services to DoD or its prime contractors, other government agencies, and private sector customers. Also provide total non-SBIR, non-STTR funding received from government and private sector sources to further develop the SBIR technology (including R&D, manufacturing, marketing, etc.). Apportion sales revenue and non-SBIR, non-STTR funding among the various Phase II projects without double-counting. (See back for further instruction.)	
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
Agency: Topic	
Number: Contract Number:	
Project	
Title:	

DoD/Primes Sales	:Oth	er Gov't Sales:	Private	Sector
Sales:				
	non-SBIR/STTR Gov't Fund	ds:	non-SBIR/STTR Pr	ivate Sector
			Funds:	
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<b>/////</b>				
Agency:			Topic	
Number:		ntract Number:		
Project				
DoD/Primes Sales	 :Oth	er Gov't Sales:	Private	Sector
Sales:				
	non-SBIR/STTR Gov't Fund	ds:	non-SBIR/STTR Pr	ivate Sector
			Funds:	
	VVVVVVVVVVVVVVVVV			
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<b>VVVVV</b>				
Agency:			Topic	
Number:	Co	ntract Number:		
Project				
Title:				
DoD/Primes Sales	:Oth	er Gov't Sales:	Private	Sector
Sales:				
	non-SBIR/STTR Gov't Fund	ds:	non-SBIR/STTR Pr	ivate Sector
			Funds:	
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<b>/////</b>				
Agency:			Topic	
Number:	Co	ntract Number:		
Project				
Title:				
	:Oth	er Gov't Sales:	Private	Sector
Sales:				

non-SBIR	/STTR Gov't Funds:		non-SBIR/STTR F	Private Sector
			Funds:	
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<b>/////</b>				
Agency:			Topic	
Number:	Contract Numb	er:		_
Project				
Title:				
DoD/Primes Sales:	Other Gov't Sal	9s:	Private	Sector
Sales:				
non-SBIR	/STTR Gov't Funds:		non-SBIR/STTR F	Private Sector
			Funds:	
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FIRM CORPORATE OFFICIAL				
NAME				
TITLE:				
1 AA				
Before signing below, please read	the cautionary note at Section 3.7	7		
OLOMATURE OF FIRM CORDER	ATE OFFICIAL		(Page	of)
SIGNATURE OF FIRM CORPORA	ATE OFFICIAL	DATE		

## INSTRUCTIONS FOR COMPLETING APPENDIX E

#### General:

The Company Commercialization Report (Appendix E) shall <u>NOT</u> be counted toward proposal page count limitations.

Appendix E should be the last page(s) of your proposal.

Use as many Appendix E forms as needed to report <u>ALL</u> Phase II projects. (Make black and white copies of this form, if necessary.) If multiple pages are submitted, fill in the "Page\_\_\_of\_\_" in the lower right corner.

Type in either a 10 or 12 characters per inch font.

Carefully align the forms in the typewriter using the underlines as a guide.

Use the Post Office two-letter abbreviation for the state (i.e. type NY not New York).

#### **Definitions:**

Sales - sales of products or non-R&D services resulting from the technology associated

with this Phase II project. Sales also includes the sale of technology or rights. Specify the sales revenue in dollars (1) to the DoD and/or DoD prime contractors, (2) to other government agencies (federal, state, local and/or foreign), and (3) to the private sector. Include sales made by your firm as well as by other firms that may have acquired the SBIR-developed technology. (e.g.,

spin-off companies, licensees, etc.)

non-SBIR/STTR funding - non-SBIR/non-STTR government or private sector funds to further develop the

technology (including R&D, manufacturing, marketing, etc.) associated with this

Phase II project.

Apportion sales/funding - If two or more Phase II projects contributed to a single products or technology

right that has been sold or received non-SBIR, non-STTR funding, divide proportionately the sales or funding among the contributing projects. For example, Phase II projects A and B lead to the sale of a new product "Widget" to the Army for a total of \$10 million and to retail software stores for \$12 million. Under the heading "DoD/Primes Sales:" put \$5 million and under the heading

"Private Sector Sales:" put \$6 million for both Phase II projects A and B.

non-R&D Services - any services that do not include additional R&D work on the SBIR technology --

for example, engineering services, study and analysis, information services.

#### Submission:

<u>ALL</u> Phase I and Phase II proposals must include a Company Commercialization Report (Appendix E). Please do not submit supplemental material.

#### **Request for Copies:**

Additional forms may be downloaded from our Home Page (http://www.acq.osd.mil/sadbu/sbir). They may also be obtained from your State SBIR Organization (Reference D) or:

DoD SBIR Support Services 2850 Metro Drive, Suite 600 Minneapolis, MN 55425-1566 (800) 382-4634

Proposer: If you wish to be notified that your
proposal has been received, please submit
this form with a stamped self-addressed envelope

TO:	
Fill in firm's name and mailing address	
SUBJECT: SBIR Solicitation No. 98.1  Topic No  Fill in Topic No.	
This is to notify you that your proposal in response to the subjec been received by	t solicitation and topic number has
Fill in name of organization to which you will send your proposal.	
Signature by receiving organization	 

**TOPIC** 

**TOPIC NUMBER** 

#### **DEFENSE TECHNICAL INFORMATION CENTER**

SMALL BUSINESS INNOVATION RESEARCH PROGRAM REQUEST FOR TECHNICAL DOCUMENT SERVICES

Small Businesses are encouraged to obtain Technical Information Packages (TIPs), annotated bibliographies of technical reports from the Defense Technical Information Center (DTIC). A TIP is prepared for each SBIR topic. TIPs are free; a small business may order as many as needed. The technical reports cited in a TIP cover DoD-funded work related to the particular topic. Ten technical reports may be obtained at no cost from DTIC during SBIR Solicitations. See section 7.1 for a more detailed description of TIPs and other valuable SBIR services available from DTIC.

- 1. You may fold, stamp and mail this form. Remember, significant mailing delays can occur.
- 2. For faster service, you may also telephone, fax or Email requests, or obtain TIPs from the DTIC SBIR Web site.

Phone: 800-363-7247 FAX: 703-767-8228 Email: sbir@dtic.mil

TOPIC NUMBER

NUMBER

TOPIC NUMBER

WWW: http://www.dtic.mil/dtic/sbir

- 3. Technical reports of interest, in addition to those cited in the TIPs, can be identified using Public STINET, the online technical reports database, available on the DTIC SBIR web site. A large selection of Full-Text Documents, including many related to SBIR topics, is also available on the web site.
- 4. DTIC provides technical services under the SBIR program year-around. Authorization to provide free hard copy is in effect during solicitations only.

REQUESTER			
	Na	ıme	
DRGANIZATION IAME			
ADDRESS			
	Str	reet	
			PHONE
Dity	State	Zip Code	Area Code/Number
AX		EMAIL	

TOPIC NUMBER

1	5 17	9	13	
2	6 18	10	14	
3	7 19		15	
4	8 20	12	16	
confirm that the b	usiness identified abo	ove meets the SBIR qualific	ation criteria in Section 2.2 of the	DoD Program Solicitation.
Signature		of		Requester:
	=====F	OLD HERE===		
				STAMP
Return A	Address			

ATTN: DTIC SBIR **Defense Technical Information Center**8725 John J Kingman Road, Suite 0944
Ft. Belvoir, VA 22060-6218

Reference C

Associate Directors of Small Business assigned at Defense Contract Management Districts (DCMD) and Defense Contract Management Area Operations (DCMAO):

#### DCMD WEST

ATTN: Renee Deavens
222 N. Sepulveda Blvd., Suite 1107
El Segundo, CA 90245-4394
(800) 233-6521 (Toll Free CA Only)
(800) 624-7372 (Toll Free-AK,HI,ID,MT,NV,OR,WA)
(310) 335-3260
(310) 335-4443 (FAX)

DCMC San Francisco ATTN: Joan Fosbery 1265 Borregas Ave. Sunnyvale, CA 94089 (408) 541-7042

DCMC San Diego ATTN: Marvie Bowlin 7675 Dagget Street, Suite 100 San Diego, CA 92111-2241 (619) 637-4922

DCMC Seattle ATTN: Alice Toms 3009 112th Ave., NE, Suite 200 Bellvue, WA 98004-8019 (206) 889-7317/7318

DCMC Santa Ana ATTN: Laura Robello 34 Civic Center Plaza, PO Box C-12700 Santa Ana, CA 92172-2700 (714) 836-2913 (ext. 659 or 661)

DCMC Van Nuys ATTN: Dianne Thompson 6230 Van Nuys Boulevard Van Nuys, CA 91401-2713 (818) 756-4444 (ext. 201)

DCMC St. Louis ATTN: William Wilkins 1222 Spruce Street St. Louis, MO 63103-2811 DCMC Phoenix

ATTN: Clarence Fouse The Monroe School Building 215 N. 7th Street Phoenix, AZ 85034-1012 (602) 379-6170 (ext 231 or 229)

DCMC Chicago ATTN: Greg Wynne O'Hare International Airport 10601 W. Higgins Road, PO Box 66911 Chicago, IL 60666-0911 (312) 825-6021

DCMC Denver

ATTN: Robert Sever Orchard Place 2, Suite 200 5975 Greenwood Plaza Blvd. Englewood, CO 80110-4715 (303) 843-4381 (800) 722-8975 (ext 165)

DCMC Twin Cities ATTN: Otto Murry 3001 Metro Drive, Suite 200 Bloominton, MN 55425-1573 (612) 335-2003

DCMC Wichita

ATTN: George Luckman U.S. Courthouse Suite D-34 401 N. Market Street Wichita, KS 67202-2095 (316) 269-7137

**DCMC** Dallas

ATTN: Jerome W. Anderson 1200 Main St., Rm. 640 P.O. Box 50500 Dallas, TX 75202-4399 (214) 670-9205

DCMC San Antonio ATTN: Thomas J. Bauml 615 E. Houston St.

P.O. Box 1040

San Antonio, TX 78294

DCMD EAST (DCMDE-DU)

ATTN: John T. McDonough 495 Summer Street, 8th Floor Boston, MA 02210-2184

(617) 753-3243

(617) 753-3243 (617) 753-3174 (FAX)

E-Mail: bdu1078@dcrbab.dla.mil

DCMC Atlanta (DCMDE-GADU)

ATTN: Sandra Scanlan 805 Walker Street Marietta, GA 30060-2789

(770) 590-6197

(770) 590-6551 (FAX)

E-Mail: sscanlan@dcmds.dla.mil

DCMC Lockheed Martin Marietta (LASC) DCMDE-RLA

ATTN: Erma A. Peacock

86 South Cobb Drive, Building B-2

Marietta, GA 30063-0260

(770) 494-2016

(770) 494-7883 (FAX)

DCMC Baltimore (DCMDE-GTDU)

ATTN: Gregory W. Prouty 200 Towsontown Blvd, West Towson, MD 21204-5299

(410) 339-4809

(410) 339-4990 (FAX)

E-Mail: gprouty@balt8.dcmds.dla.mil

DCMC Birmingham (DCMDE-GLDU)

ATTN: Lola B. Alexander Burger Phillips Center 1910 3rd Ave, N.

Suite 201

Birmingham, AL 35203-2376

(205) 716-7403 (205) 716-7836 (FAX)

E-Mail: lbalexander@dcmds.dla.mil

DCMC Boston, DCMDE-GFDU

ATTN: Philip R. Varney 495 Summer Street Boston, MA 02210-2184 (617) 753-3467/4110 (617) 753-4005

E-Mail: pvarney@dcrb.dla.mil

DCMC Clearwater, North Florida DCMDE-GCDU

ATTN: Jim Masone

Gadsen Building, Suite 200

9549 Coger Blvd

St. Petersburg, FL 33702-2455

(813) 579-3015

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SF 298 REPORT DOCUMENTATION PAGE GOES HERE Reference E

#### **DoD Fast Track Guidance**

This paper contains DoD's official guidance on what types of relationships between a small company and outside investors in the company qualify as an investment under the SBIR and STTR Fast Track ("Fast Track investment"). It includes specific examples of company-investor relationships that we have been asked about and our official responses on whether these relationships qualify as a Fast Track investment. If you have questions about whether a particular company-investor relationship qualifies, please contact the DoD SBIR/STTR Help Desk (tel. 800/382-4634, fax 800/462-4128, e-mail SBIRHELP@us.teltech.com). The Help Desk will refer any policy or substantive questions to appropriate DoD personnel for an official response.

#### I. General Guidance on What Qualifies As A "Fast Track Investment"

- The investor must be an <u>outside</u> investor, which may include such entities as another company, a venture capital firm, an individual "angel" investor, a non-SBIR/non-STTR government program, or any combination of the above. It does not include the owners of the small business, their family members, and/or "affiliates" of the small business, as defined in Title 13 of the *Code of Federal Regulations* (C.F.R.), Section 121.103. As discussed in that Section:
  - \* Concerns are affiliates of each other when one concern controls or has the power to control the other, or a third party or parties controls or has the power to control both.
  - \* [We] consider factors such as ownership, management, previous relationships with or ties to another concern, and contractual relationships, in determining whether affiliation exists.
  - \* Individuals or firms that have identical or substantially identical business or economic interests, such as family members, persons with common investments, or firms that are economically dependent through contractual or other relationships, may be treated as one party with such interests aggregated.
- The <u>investment</u> must be an arrangement in which the outside party provides cash to the small company in return for such items as: equity; a share of royalties; rights in the technology; a percentage of profit; an advance purchase order for products resulting from the technology; or any combination of the above.

### II. Specific examples of What Does and Does Not Qualify As a "Fast Track Investment"

#### A. Examples of What Qualifies as an "Outside" Investor"

(1) Can a small company contribute its own internal funds to qualify for the Fast Track?

No. DoD is seeking outside validation of the commercial potential of the company's technology, and therefore requires that the funds come from an outside investor. Also, cash from an outside investor shows up plainly on the company's books and therefore can be more readily verified than a company's own matching contribution.

(2) Company A spins off company B, which wins a phase I SBIR award. Company A then wants to contribute matching funds to qualify company B for the Fast Track. Can A be considered an outside investor for purposes of the Fast Track?

In making our determination of whether company A is an outside investor, we would be guided by the definition of "affiliates" in 13 C.F.R. Sec. 121.103, discussed above. Our presumption is that in this example A and B would be considered "affiliates," and that A would therefore not be an outside investor for purposes of the Fast Track. However, that presumption could be rebutted by showing, for example, that the spin-off occurred several years ago and that A and B do not exercise control over one another, do not have common ownership or management, have different business interests, etc.

(3) Small company S wins a phase I SBIR award. The president of S is a major shareholder in another company Y, which wants to contribute matching funds to qualify S for the Fast Track. Can Y be considered an outside investor?

Our presumption is that Y would not be considered an outside investor. Our determination would be guided by whether the president's stake in Y is large enough that S and Y would be considered "affiliates" under 13 C.F.R. Sec. 121.103. Subsection © of Section 121.103 specifically discusses affiliation based on stock ownership:

- c. Affiliation based on stock ownership.
  - A person is an affiliate of a concern if the person owns or controls, or has the power to control 50
    percent or more of its voting stock, or a block of stock which affords control because it is large
    compared to other outstanding blocks of stock.
  - 2. If two or more persons each owns, controls or has the power to control less than 50 percent of the voting stock of a concern, with minority holdings that are equal or approximately equal in size, but the aggregate of these minority holdings is large as compared with any other stock holding, each such person is presumed to be an affiliate of the concern.

If S and Y are found to be affiliates, we would determine that Y is not an outside investor.

(4) Does the outside investor have to be a single entity (e.g., a single venture capital firm) or can it be more than one entity (e.g., two angel investors and a venture capital firm)?

It can be more than one entity.

(5) Small company A contributes matching funds to small company B in order to qualify B for the Fast Track, and, at the same time, B contributes matching funds to A in order to qualify A for the Fast Track. Do A and B qualify as outside investors under the Fast Track?

No. A and B's relationship is such that their investment in each other would not provide outside validation of the commercial potential of their respective SBIR projects. We would therefore not consider them to be outside investors for purposes of the Fast Track.

(6) Can the brother of an employee of small company S contribute funds to qualify S for the Fast Track?

Probably not. Again, we would be guided by the definition of "affiliates" in 13 C.F.R. Sec. 121.103. The brother presumptively would be an affiliate of company S and not an outside investor.

(7) Venture capital firm V currently is a 22 percent shareholder in small company S. Can V invest additional funds in S to qualify S for the Fast Track?

Our presumption is yes. In making our determination, we would be guided by whether V and S are "affiliates," as defined in 13 C.F.R. Sec. 121.103. Section 121.103 provides (in subsection (b)(5)) that a venture capital firm is not affiliated with a company if the venture capital firm does not control the company -- e.g., by owning more than 50 percent of the stock of a small company (prior to its investment under the Fast Track), as described in 13 C.F.R. 107.865. 13 C.F.R. 107.865 can be viewed on the internet at http://www.acq.osd.mil/sadbu/sbir/affil2.htm.

(8) Large company L makes a cash investment in small company S, and then serves as a subcontractor to S on an SBIR project. Can L's investment in S count as a matching contribution for purposes of the Fast Track?

Only L's cash investment <u>net of</u> its subcontracting effort can count as matching funds for purposes of the Fast Track. For example, if L invests \$750,000 in S and subcontracts with S for \$250,000, only L's net contribution (\$500,000) can count as matching funds for purposes of the Fast Track.

(9) Company Y makes a cash investment in small company S for purposes of the Fast Track, and also enters into a separate contract with S under which Y provides certain goods/services to S in return for \$500,000. Can Y's cash investment in S count as a matching contribution for purposes of the Fast Track?

As in the previous example, only Y's cash investment <u>net of</u> the \$500,000 it receives from S can count as matching funds for purposes of the Fast Track. However, if the separate contract between Y and S pre-dates S's submission of its phase I SBIR proposal, Y's entire cash investment can count as matching funds for purposes of the Fast Track.

(10) A group of investors wishes to invest funds in small company S to qualify S for the Fast Track. One of the investors is the mother of S's president, who wants to contribute \$50,000 toward the effort. Can the group's investment in S count as a matching contribution to qualify S for the Fast Track?

The mother's investment of \$50,000 does not count, because she is not an outside investor (see item (6) above). Contributions of the other investors can count provided that they meet the other conditions for the Fast Track (e.g., each must be an outside investor).

#### B. Examples of What Qualifies as an "Investment"

(1) Can a loan from an outside party qualify as an "investment" for purposes of the Fast Track?

No. The rationale behind the Fast Track is that an outside party is betting on the company's success in bringing the technology to market -- not just its ability to repay a loan.

(2) How about a loan that is convertible to equity?

A loan that is convertible to equity at the company's discretion would count as an investment under the following circumstances: (1) the loan is provided by a public entity (e.g., a state agency), or (2) the loan is provided by a private entity, and the SBIR company actually converts the loan to equity before the end of phase I.

(3) Can in-kind contributions from an outside investor count as matching funds under the Fast Track?

No. The matching contribution must be in cash. A cash contribution is a stronger signal of the outside investor's interest in the technology, and can be readily verified.

(4) Can a purchase order from an outside investor count as a matching contribution under the Fast Track?

An advance purchase order for new products resulting from the SBIR project can count as a matching contribution under the Fast Track (assuming the other Fast Track conditions are met).

(5) Can the funds raised from an initial public offering (IPO) count as matching funds for purposes of the Fast Track?

Yes, as long as the offering memo indicates that a portion of the funds from the IPO will pay for work (e.g., R&D, marketing, etc.) that is related to the SBIR project.

(6) If large company L pays small company S for work related to S's SBIR project and expects a deliverable (goods or services) from S in return, would that qualify as an "investment"?

No, for the same reason a loan does not count. Specifically, in this situation the large company is not betting on the small company's success in bringing the technology to market, but merely on its ability to provide the deliverable.

#### C. Examples Re: Timing/Logistics of the Fast Track Investment

(1) Can entity E's investment in small company S during the first month of S's phase I SBIR project count as a matching contribution to qualify S for the Fast Track?

Yes, provided that E is an outside investor and that the other Fast Track conditions are met. The investment can occur any time after the start of the phase I project.

(2) Small company A, which has won a phase I award, spins off small company B to commercialize the SBIR technology. A then convinces angel investor I to invest funds in B. Can I's investment in B count as a matching contribution to qualify A for the Fast Track?

For I's investment in B to qualify A for the Fast Track, DoD must determine that A and B are substantially the same entity, as evidenced, for example, by their meeting the definition of "affiliates" in 13 C.F.R. Sec.121.103. If DoD determines that A and B are substantially the same entity, I's investment in B could qualify A for the Fast Track. Of course, the parties must also meet the other conditions for the Fast Track (e.g., I must be an outside investor).

(3) Small company S is collaborating with a university on an STTR project. Investor I wishes to provide funds to the university in order to qualify S for the STTR Fast Track. Can I's investment in the university count as a matching contribution to qualify S for the Fast Track?

In order to qualify S for the STTR Fast Track, I's investment of funds must be in small company S, not in the university. S can then subcontract some of the funds to the university. The rationale is that a cash investment in the small company is a very strong indication of commercial potential, whereas an investment in the university is less so.

Reference F

# DoD's Critical Technologies (Defense Technology Area)

- 1. Propulsion technology Aerospace Power directed propulsion and power systems for aircraft, missiles, and space vehicles in four major sub-areas: 1) gas-turbine propulsion systems for aircraft and cruise missiles; 2) propulsion systems for space and missile systems; 3) ramjet, scramjet, combined cycle propulsion and space-launch missile systems and fuels; non-propulsive power generation systems for aircraft, missiles, and space vehicles.
- 2. Air Vehicles/Space Vehicles -- Air vehicles: technology of

aeromechanics, flight controls, subsystem, air vehicle structures in fixed wing vehicles, rotary wing vehicles, unmanned air vehicles, and Space Vehicles: technology oriented system integration technology. toward the spacecraft bus, technologies unique to space and the military and their implementation through flight experiments in the following sub-areas: 1) thrust producing engines and devices for space launch, orbit transfer, and maneuver; 2) generation and distribution of electrical power on-board spacecraft; 3) management for all satellite applications; 4) structures focused on adapting advanced materials and structures produced in basic research for space applications; 5) survivability focused on "environments" (both natural and hostile) and "techniques" (including active and passive approaches); 6) quidance, navigation, and control for the launch from earth, earth orbit and free space; 7) technology integration focused on adapting products of other technology areas to systems; flight experiments which focus space 8) on space qualification and transfer of technology to the military and civilian space communities.

- 3. Battlespace Environments -- study, characterization, prediction, modeling, and simulation of the terrestrial, ocean, lower atmosphere, and space/upper atmosphere environments to understand their impact on personnel, platforms, sensors, and systems; enable the development of tactics and doctrine to exploit that understanding; and optimize the design of new systems.
- yield superior technology in support of Biomedical mission to provide health support to U.S. military forces by preserving the combatant's optimal mission capabilities and health despite battle and non-battle threats from military operations. Medical research programs must be conducted for the benefit of mankind and many are regulated by the U.S. Food and Drug Administration.
- 5. Chemical and Biological Defense -- U.S. forces must be prepared for conflict in a chemical and biological environment in a Global Reach concept. The CB defense technology area includes four major subareas: 1) detection; 2) protection; 3) decontamination, and 4) information processing and dissemination.
- Clothing, Textiles and Food -- focuses on protecting and sustaining soldiers, sailors, airmen, and marines, individually collectively. This technology includes two sub-areas: 1) Clothing and textiles - includes all textile-related polymer, fiber, yarn, fabric, film, dye, pigment, coating, and clothing systems and their packaging which enhance survivability, performance, and mobility. ballistic These efforts provide protection, percutaneous chemical/biological protection, countermeasures to sensors, integrated protection (flame/incendiary and anthropometric/biomechanical concepts), and bioengineered materials for protection. This subarea includes textile based technologies for items such as tentage and parachutes. 2) Food -- includes science and technological efforts to sustain warriors and enhance their mental and physical acuity and performance by nutritional performance enhancement, food preservation, food packaging, consumer acceptance, and equipment and energy technologies. This technology area supports the unique feeding requirements of the military services ranging from

- general purpose individual rations to group ration systems for special operations.
- 7. Command, Control and Communications (C3) -- area encompasses systems of all types: data processing hardware and software dedicated operational planning, monitoring assessment or (including distributed processing, information fusion), distributed NOT INCLUDED: general storage, and distributed data management. purpose computer hardware and high performance computers, general purpose software, languages, software engineering, environments, and communications and processing elements considered subsystems vehicles.
- 8. Computing and Software -- push the frontiers of advanced information technology beyond that normally achieved by the commercial sector alone, to enable creation of broad range advanced information processing systems of critical value in support of the missions of the DoD. This area is separated into six broad subareas: 1) system software; 2) software and systems development; 3) intelligent systems; 4) user interface; 5) computing systems and architecture; and 6) networking.
- 9. Conventional Weapons -- develop conventional armament technologies for all new and upgraded non-nuclear weapons which includes efforts directed specifically toward non-nuclear munitions, their components, and launching systems, guns, bombs, guided missiles, projectiles, special warfare munitions, EOD devices, mortars, mines, countermine systems, torpedoes, and underwater weapons and their associated combat control. There are six major sub-areas: 1) fuzing/safe & arm; 2) guidance and control; 3) guns; 4) countermine/mines; 5) warheads and explosives; and 6) weapon lethality/vulnerability.
- 10. Electronics -- extends from basic research to applications at the subsystem level. The electronics technology area includes research, fabrication, testing development, design, and of electronic materials; electronic devices, including digital, analog, microwave, optoelectronic, vacuum and integrated circuits; and electronic modules, assemblies, and subsystems organized into five sub-areas: 1) RF components; 2) electro-optics; 3) microelectronics; 4) electronic materials; and 5) electronic models and subsystems.
- 11. Electronic Warfare/Directed Energy Weapons -- Electronic Warfare: Develop technology for the offensive and defensive application of EW which includes efforts in intercept, counter, and exploit the complex the entire threat weapons spanning electromagnetic including radio frequency (RF), infrared (IR), electro-optic (EO), ultraviolet (UV), and multispectral/multimode sensors. Electronic Warfare is divided in three subareas: 1) force protection; Offensive EW; and 3) EW support functions. <u>Directed Energy Weapons:</u> Technologies relate to the production and projection of a beam of concentrated electromagnetic energy or atomic/subatomic particles. The DEW technology is divided into three sub-areas: 1) laser weapons; 2) RF weapons; and 3) particle beam weapons.
- 12. Environmental Quality/Civil Engineering -- Environmental Quality: technologies which reduce the costs of DoD operations while ensuring mission accomplishment is not jeopardized by adverse environmental impacts. There are four sub-areas: 1) cleanup of contaminated sites resulting from DoD operations; 2) compliance with laws concerning the

- treatment and disposal of hazardous waste products; 3) pollution prevention; 4) conservation of natural and cultural resources. <u>Civil Engineering</u>: technology efforts to solve critical DoD civil engineering problems related to training, mobilizing, deploying, and employing a force at any location at any time. This technology area includes survivability and protective structures, airfields and pavements, conventional facilities, critical airbase facilities and recovery, ocean and waterfront facilities and operations, sustainment engineering, and fire fighting.
- 13. Human Systems Interface -- technology fully leverages and extends the capabilities of warfighters and maintainers to ensure that fielded systems will exploit the fullest potential of the warfighting team, irrespective of gender, mission or environment. This technology is organized into four areas: 1) crew systems integration and protection; 2) performance aiding; 3) information management and display; and 4) performance assessment and design methodologies.
- 14. Manpower, Personnel and Training -- Manpower and personnel technology addresses the recruitment, selection, classification, and assignment of people to military jobs. It seeks to reduce the attrition of high-quality personnel and helps the senior department leadership to predict and measure the consequences of policy decisions. Training systems technology improves the effectiveness of DoD's investment in training instruction, improves the efficiency of student flow through the training pipeline, enhances military training systems, provides opportunities for skill practice and mission rehearsal, and lowers life-cycle costs of training systems and combat systems.
- 15. Materials, Processes and Structures -- technologies produce an enabling array of capabilities for every DoD system that flies in air or space, navigates on land or over/under the sea, and fires or is fired upon. MP&S spans all material categories -- metal and intermetallic alloys; ceramics; polymers; composites of all types; semiconductors; superconductors, optical, ferroelectric, and magnetic materials; and materials for power sources.
- 16. Sensors -- technologies are divided into five major sub-areas: radar sensors; 2) electro-Optic sensors; 3) acoustic sensors; automatic target recognition; and 5) integrated platform electronics sensors. Applications include strategic and surveillance, identification and targeting of threats from all military platforms including satellites, aircraft, helicopters, ships, submarines, ground vehicles and sites, unmanned air vehicles, unattended ground sensors and the individual soldier.
- 17. <u>Surface/Under</u> Surface/Under Surface Vehicles/Ground Vehicles surface vehicles: technology for improved combat efficiency, survivability, and stealth of surface ships, submarines and unmanned undersea vehicles. <u>Ground vehicles:</u> technologies to support the basic Army and Marine Corps land combat functions: shoot, move, communicate, survive and sustain. Covered here are propulsion and vehicle subsystems, hydrodynamics, power, track and suspension, signature reduction, fuels and lubricants and integration technologies related to land combat vehicles, including amphibious vehicles with a ground combat role.
- 18. Manufacturing Sciences and Technology (MS&T) -- area is focused on cross-cutting engineering and manufacturing process technologies

beyond those developed in conjunction with new product technologies in the other technology areas. Includes ARPA 6.2 and 6.3 programs in information technology for manufacturing applications, Service/DLA manufacturing technology (ManTech) programs, advanced technology demonstrations for affordability, and advanced industrial practices to demonstrate the combination of improved process technology and improved business practices. These programs encompass process technologies at all manufacturing levels (enterprise/factory/cell/machine/unit process).

19. Modeling and Simulation (M&S) -- includes development, integration, and implementation of tools and applications to apply M&S more broadly and with greater validity across DoD. Directly dependent on enabling technologies such as high speed computing, communications and networking, human systems interfaces, and software. Major sub-areas are: 1) architectures (software, data/database methodologies, and interfaces with communications and networks); 2) environmental representations (terrain, weather, atmosphere, space, oceans, and others); and 3) computer generated forces (systems representations, human behaviors, and their interactions).

Note: The above information is a summary of the information contained in documents "Defense Technology Plan" (DTIC # A285415) and "Defense Science and Technology Strategy" (DTIC # A285414).

Reference G DoD SBIR Solicitation 98.1

## **The DoD SBIR Mailing List**

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